From:

Peter Wallack St. Color Vallage Color

Sent:

Tuesday, September 06, 2016 2:25 PM

To:

Carley, Stephen (DPS)

Cc:

Sampson, Stephen (DPS)

Subject:

524CMR17:00 -Section 17.08 (4) - Confined Space Egress - Zero Clearance doors -

comments

**Attachments:** 

17.08--Landing Doors for Power Passenger Elevators -Pages from 524cmr17-Power

Passenger and Freight Elevators .pdf

Follow Up Flag:

Follow up

Flag Status:

Flagged

Stephen,

With the deletion of 524CMR17:00 -specifically Section 17.08 (4) - Confined Space Egress; the result is a lack of guidance for securing the entry into private condominiums with a minimum two landing door arrangement rather than create a locked vestibule.

Section 17.08 (4) provided for an elevator slide siding hall door and a locked landing door [swing door] to secure a private condominium

where the elevator was otherwise providing direct access into the unit. This "confined locked " space was limited to four [4"] inches.

Suggest that this provision be carried over to 524CMR35:00 Section 2.11.

Respectfully,

Peter

## **Peter Wallack**

Consultant

Р

区量

This message is confidential. It may also be privileged or otherwise protected by work product immunity or other legal rules. If you have received it by mistake, please let us know by e-mail reply and delete it from your system; you may not copy this message or disclose its contents to anyone. Please send us by fax any message containing deadlines as incoming e-mails are not screened for response deadlines. The integrity and

#### 17.07: continued

- (d) The center of the vision panel for horizontal, slide and swing type doors shall be not less than 54" nor more than 66" above the elevator landing. For vertical biparting-parting counterbalanced doors, it shall be located to comply with the dimensions specified insofar as the conditions will permit.
- (e) If used for power-operated hoistway doors, the wired-glass panel shall be substantially flush with the surface of the landing side of the door.
- (11) Door counterweights shall run in metal guides in such a manner that they cannot become dislodged or shall be boxed in. The bottoms of the guides or boxes shall be constructed so as to retain the counterweight if the counterweight rope breaks.
- (12) Power opened hoistway doors shall be equipped with interlocks, operating mechanisms and control systems which are arranged to prevent the opening of all doors in the hoistway other than the door or doors which are located as follows:
  - (a) At that landing where the car is at rest.
  - (b) At that landing when the car is coasting through the landing zone with its operating device in the stop position.
  - (c) At that landing where the car is being moved by the car leveling devices within the landing zone.
- (13) Hoistway doors shall be arranged so that they may be opened by hand from the hoistway side unless locked "out of service". Neither the door at the main floor landing or at the top or bottom terminal landing shall be locked "out of service" when the elevator is in service.
- (14) Where an elevator is installed in a single blind hoistway, there shall be installed in the blind portion of the hoistway an emergency door at every third floor, which fully protects the opening, but not more than 42 feet apart, conforming to the following:
  - (a) The clear opening shall be at least two feet four inches wide and six feet six inches high
  - (b) It shall be easily accessible and free from fixed obstructions.
  - (c) It shall be either of the horizontally sliding type or swinging single section type, irrespective of the type of door installed at other landings.
  - (d) It shall be self-closing and self-locking with the firefighter's key lock (524 CMR 17.39(2)), and shall be marked in letters not less than two inches high "DANGER ELEVATOR HOISTWAY."
  - (e) It shall be provided with an electric contact conforming to 524 CMR.
  - (f) It shall be unlocked from the landing side only through the use of the firefighter's key (524 CMR 17.39).
  - (g) The key lock shall be so designed that the key shall be removable only in the locked position.
- (15) All landing door frames must be thoroughly grouted to obtain the proper fire rating.
- (16) The hoistway side of each landing entrance shall have a minimum four inch high numeral identifying the floor level. Said numeral shall be a decal or adhesive backed material.

## 17.08: Landing Doors for Power Passenger Elevators

- (1) <u>Automatic Fire Door</u>. No automatic fire door shall lock any landing opening in the hoistway enclosure of any passenger elevator or lock any exit leading from any hoistway landing door to the outside of the building.
- (2) <u>Landing Openings</u>. Landing openings in passenger elevator hoistway enclosures shall be protected by horizontal sliding doors, combination sliding and swinging doors, or by swinging doors.
- (3) <u>Certain Measurements</u>. The distance between the hoistway side of the landing door opposite the car opening and the hoistway edge of the landing threshold on elevators which can be operated only from the car shall be not more than four inches. For automatic-operation elevators, the distance between the hoistway side of the hoistway door opposite the car opening and the hoistway edge of the landing threshold, shall be not more than the following:

#### 17.08: continued

- (a) For swinging doors, 3/4 inch.
- (b) For sliding doors, 21/4 inches.

In no case shall the hoistway face of the hoistway door project into the hoistway beyond the edge of the landing sill. When the hoistway door consists of two or more sections, the distance specified in 524 CMR 17.08(3)(b) shall be measured from the section of the door nearest to the edge of the hoistway landing sill. Where distances are greater that specified above, space guards or baffles may be installed in accordance with 524 CMR 17.14(8).

- (4) <u>Confined Space Egress</u>. No elevator landing shall comprise of, or lead to, a confined locked space of over four inches without either:
  - (a) the installation in the space of a means to recall the elevator; or
  - (b) provision of a means to keep the elevator at the landing with the car and landing doors in the open position until egress from the confined locked space is achieved.

### 17.09: Landing Doors for Power Freight Elevators

(1) <u>Landing Opening</u>. Each landing opening in a freight elevator hoistway shall be equipped with a door set within four inches of the face of the landing threshold.

Bi-parting counterbalanced doors shall have the lower edge of the upper door section provided with a fire-resistive, non-shearing, non-crushing member to provide a spacing of not less than 4" between the rigid members of the door sections when closed.

Any rigid astragal, locking or latching device overlapping the meeting edge is prohibited.

- (2) <u>Types of Landing Doors</u>. Landing doors may be horizontally or vertically sliding, counterbalanced vertically sliding, combination sliding and swinging or swinging type.
- (3) <u>Power-operated Vertical Bi-parting Counterbalanced Doors.</u> If vertical bi-parting counterbalanced doors are power operated, the landing door shall not start to close until after the car gate is within 12" of full closure, and, on opening, the car gate shall not start to open until the landing door is within 12" of its full open position.
- (4) <u>Pull Straps on Manually-operated Vertically-sliding Bi-parting Counterbalanced Hoistway Doors.</u> Manually-operated vertically sliding bi-parting counter-balanced hoistway doors of elevators which can be operated from the landings shall be provided with pull straps on the inside and the outside of the door and shall be located at the lower edge of the upper door section. The length of the straps shall conform to the following:
  - (a) The bottom of the straps shall be not more than six feet above the floor when the door is in the fully-opened position.
- (b) The length of the straps shall not be extended by means of ropes or other materials.

  Pull straps where provided on manually operated vertically sliding bi-parting doors of

elevators which can be operated from the car shall only be mounted on the inside of the door and shall also conform to the requirements of 524 CMR 17.09(4)(a) and (b).

situal and dominant to the regularisments of the content of the co

(5) <u>Counterbalanced Doors</u>. Single or multisection vertically-sliding doors and vertically-sliding bi-parting counterbalanced doors shall be so counterbalanced that they will not open by gravity. Fastenings shall be provided to prevent the detachment or dislodgment of the counterbalancing weights of doors. Suspension means and their connections for vertically-sliding counter weighted doors shall have a safety factor of not less than five.

# 17.10: Hoistway Door Interlocks

- (1) Interlocks shall be arranged to prevent the operation of the elevator machine by the operating devices in a direction to move the car away from the landing unless all hoistway doors are both closed and locked in the closed position; and the interlock shall not be required to prevent the movement of the car by inching or leveling devices with the hoistway door open.
- (2) The interlock shall prevent the opening of the hoistway door from the landing side unless the car either is at rest within the landing zone or coasting through the landing zone with its operating devices in the stop position.